

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/04202

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C07C69/34, 69/708, C08L67/00, C08K5/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C07C69/34, 69/708, C08L67/00, C08K5/10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
CAPLUS (STN), REGISTRY (STN)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 4390594 A (Saint Gobain Vitrage), 28 June, 1983 (28.06.83), Column 1, lines 44 to 46 & JP 57-155244 A & EP 54466 A1	1 2-19
X A	EP 1153602 A1 (SHISEIDO CO., LTD.), 14 November, 2001 (14.11.01), Claims & JP 2001-240526 A & WO 01/45665 A1	1 2
X A	JP 63-199794 A (Nissan Motor Co., Ltd.), 18 August, 1988 (18.08.88), Claims; examples (Family: none)	1 2

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search  
27 August, 2003 (27.08.03)Date of mailing of the international search report  
16 September, 2003 (16.09.03)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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PCT/JP03/04202

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 94/06856 A1 (BIOPAK TECHNOLOGY, LTD.), 31 March, 1994 (31.03.94), & JP 8-501584 A & US 5502158 A & EP 662103 A1	1-19

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## Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

The subject matters of the claims are classified into the following groups.

- (1) Claims 1, 4, 6, 9, and 14-16 and that part of claims 11-13 which relates to a compound of the formula (1):  
a compound represented by the formula (1) and use thereof as a plasticizer
- (2) Claims 2, 5, 7, 10, and 17-19 and that part of claims 11-13 which relates to a compound of the formula (3):  
a compound represented by the formula (3) and use thereof as a plasticizer

(continued to extra sheet)

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.  
☒ No protest accompanied the payment of additional search fees.

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Continuation of Box No.II of continuation of first sheet(1)

(3) Claims 3 and 8 and that part of claims 11-13 which relates to a compound other than those of the formulae (1) and (3):

a plasticizer other than the compounds represented by the formulae

(1) and (3)

Among these groups, there is no relationship involving any special technical feature common to these. Consequently, these groups are not considered to be so linked as to form a single general inventive concept.

Therefore, the number of inventions disclosed in the claims of this international application is 3.

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